



PEDAR



U.S. Department of Education
Institute of Education Sciences
NCES 2003-162

How Families of Low- and Middle-Income Undergraduates Pay For College: Full-Time Dependent Students In 1999-2000

Postsecondary Education Descriptive Analysis Reports

Executive Summary

The complete report is available at
<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2003162>

June 2003

Susan P. Choy
Ali M. Berker
MPR Associates, Inc.

C. Dennis Carroll
Project Officer
National Center for
Education Statistics

U.S. Department of Education

Rod Paige
Secretary

Institute of Education Sciences

Grover J. Whitehurst
Director

National Center for Education Statistics

Val Plisko
Associate Commissioner

The National Center for Education Statistics (NCES) is the primary federal entity for collecting, analyzing, and reporting data related to education in the United States and other nations. It fulfills a congressional mandate to collect, collate, analyze, and report full and complete statistics on the condition of education in the United States; conduct and publish reports and specialized analyses of the meaning and significance of such statistics; assist state and local education agencies in improving their statistical systems; and review and report on education activities in foreign countries.

NCES activities are designed to address high priority education data needs; provide consistent, reliable, complete, and accurate indicators of education status and trends; and report timely, useful, and high quality data to the U.S. Department of Education, the Congress, the states, other education policymakers, practitioners, data users, and the general public.

We strive to make our products available in a variety of formats and in language that is appropriate to a variety of audiences. You, as our customer, are the best judge of our success in communicating information effectively. If you have any comments or suggestions about this or any other NCES product or report, we would like to hear from you. Please direct your comments to:

National Center for Education Statistics
Institute of Education Sciences
U.S. Department of Education
1990 K Street NW
Washington, DC 20006-5651

June 2003

The NCES World Wide Web Home Page is: <http://nces.ed.gov>

The NCES World Wide Web Electronic Catalog is: <http://nces.ed.gov/pubsearch>

Suggested Citation

U.S. Department of Education, National Center for Education Statistics. *How Families of Low- and Middle-Income Undergraduates Pay for College: Full-Time Dependent Students in 1999-2000*, NCES 2003-162, by Susan P. Choy and Ali M. Berker. Project Officer: C. Dennis Carroll. Washington, DC: 2003.

For ordering information on this report, write:

U.S. Department of Education
ED Pubs
P.O. Box 1398
Jessup, MD 20794-1398

or call toll free 1-877-4ED-PUBS or order online at <http://www.edpubs.org>

Content Contact:

Aurora D'Amico
(202) 502-7334
Aurora.D'Amico@ed.gov

Executive Summary

Paying for College

Paying for college has always been considered primarily a family responsibility, to be met to the extent possible through some combination of income, savings, and borrowing. However, a variety of government, institutional, and private programs exist to help students who lack the necessary financial resources or whose academic or other achievements qualify them for scholarships. This aid may take the form of grants or scholarships, which do not have to be repaid; loans, which must be repaid; or work-study, which provides aid in exchange for work, usually in the form of campus-based employment. In 1999–2000, more than half (55 percent) of all undergraduates received some type of financial aid to help pay for college (Berkner et al. 2002).

Originally, the goal of federal student aid policy was to increase college access for students from low-income families, but as tuition increased, this objective was expanded to make college more affordable for students from middle-income families as well (Spencer 1999). Federal grant aid is targeted to low-income students, while subsidized loans are available to both low- and middle-income students. In the 1992 Amendments to the Higher Education Act of 1965, Congress made it easier for students to qualify for financial aid, raised loan limits, and made unsubsidized loans available to students regardless of need. In the past decade, the federal government has increasingly relied on the tax code as a tool to assist students. The Taxpayer Relief Act of 1997 and the 2001 Economic Growth and Tax Relief

Reconciliation Act include a number of provisions designed to help individuals and families to save for, repay, or meet current higher education expenses by reducing their federal income tax liability. Some of these benefits phase out as income increases, but they are broadly available (U.S. General Accounting Office 2002). In addition to federal aid, students may have access to state- or institution-sponsored aid (Berkner et al. 2002). Income restrictions for these programs vary. Finally, most states offer prepaid tuition or college savings plans to help students at all income levels pay for college (The College Board 2003).

As debates continue over who should get what kinds of aid and how much, it is important to know what students and their families are actually paying for college, where the money is coming from, and how students' methods of paying vary with their family income and the type of institution they attend. To inform these debates, this report uses data from the 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000) to describe how the families of dependent students¹ used financial aid and their own resources to pay for college, emphasizing variation by family income and type of institution attended. The study covers students who were dependent undergraduates attending a public 2-

¹ Undergraduates under 24 years of age are generally considered financially dependent for the purposes of determining financial aid eligibility unless they are married, have legal dependents, are veterans, or are orphans or wards of the court. However, financial aid officers are permitted to use their professional judgment to declare students to be independent under unusual circumstances.

year college or a public or private not-for-profit 4-year institution full time, full year during the 1999–2000 academic year.² Approximately one-quarter of all undergraduates met the criteria for inclusion in the analysis.³

The tables in this report show many aspects of student financing at five types of institutions, and within each type, at five levels of family income. The categories of institutions were chosen to group institutions that are similar in terms of mission, characteristics of students, and, especially, levels of price and availability of institutionally funded student aid. They include public 2-year; public 4-year nondoctoral; public 4-year doctoral; private not-for-profit 4-year nondoctoral (except liberal arts); and private not-for-profit 4-year doctoral and liberal arts institutions.⁴ The family income levels were chosen to correspond roughly to levels of financial need and eligibility for certain types of federal grants and loans.

Low-income students have a greater need for financial aid than middle-income students within each type of institution, and students at both

income levels need more financial aid at higher priced institutions than at lower priced ones. By reporting data by income within type of institution, the tables show both of these patterns. Differences between public and private not-for-profit institutions reflect their different prices of attending. Although data are presented separately in the tables for the five income groups, the discussion focuses on students from low-income (less than \$30,000) or middle-income (\$45,000–\$74,999) families.

Financial Need

For aid purposes, a student's financial need is defined as the difference between the price of attending and the expected family contribution (EFC). A student budget, which represents the price of attending the institution selected, is calculated for each student. It takes into account the amounts needed to cover tuition and fees, books and materials, and reasonable living expenses in that area. The amount allocated for living expenses depends on whether the student lives on campus, independently off campus, or with parents or relatives. The EFC is calculated using a formula based primarily on family income and assets (with some adjustments for circumstances such as the number of siblings in college), and is not related to the price of attending. Thus, a student would be expected to contribute the same amount regardless of the institution selected but would have greater financial need at an institution with a high price of attending than at an institution with a low one.

In 1999–2000, average tuition and fees for full-time dependent students ranged from \$1,600 at public 2-year institutions to \$19,900 at private not-for-profit doctoral and liberal arts institutions, and the average student budget (i.e., price of attending) ranged from \$8,600 to \$28,800. The

²Students who attended more than one institution were excluded from the analysis because of the confounding effects of attending different-priced institutions and receiving different financial aid awards at each institution. Students who were not U.S. citizens or permanent residents were also excluded because they are not eligible for federal financial aid. Students who attended private for-profit institutions or less-than-4-year institutions other than public 2-year were excluded because there were not enough full-time dependent students at those types of institutions to make meaningful comparisons.

³About one-half of all undergraduates are independent, and about one-half of dependent students do not enroll full time, full year at one institution.

⁴On several key measures related to paying for college, including tuition, institutional and other forms of aid, and students' highest degree expectations, students at private not-for-profit liberal arts institutions appear to be more like their counterparts at doctoral than at nondoctoral institutions. Therefore, they were grouped with doctoral institutions for this analysis.

average EFC for low-income students (calculated including those with a zero EFC) was between \$1,000 and \$1,500, but many low-income students (between 31 and 45 percent, depending on the type of institution attended), had a zero EFC. Because EFC depends on the families' financial circumstances and is not affected by where students enroll, variation across institution types reflects variation in the financial circumstances of the students who chose those types of institutions. Virtually all middle-income students had a positive EFC (at least 99 percent at each type of institution), which averaged between \$8,300 and \$9,000.

Virtually all low-income students (99 percent or more) had financial need, regardless of where they enrolled. Among those with need, the average amount ranged from \$7,400 at public 2-year institutions to \$26,000 at private not-for-profit doctoral and liberal arts institutions. The percentage of middle-income students with financial need varied, depending on where they enrolled. At public 2-year institutions, 48 percent of middle-income students had financial need, but at private not-for-profit doctoral and liberal arts institutions, 97 percent had need. The average amount for middle-income students with need ranged from \$2,600 at public 2-year institutions to \$20,900 at private not-for-profit doctoral and liberal arts institutions.

Financial Aid

Most low-income students received financial aid: 78 percent at public 2-year institutions, and 86 to 98 percent at 4-year institutions. Among middle-income students, less than half received aid at public 2-year institutions (40 percent), but 71 to 93 percent did so at 4-year institutions. Students from both income groups were more likely to receive aid at private not-for-profit

nondoctoral institutions than at any other type of institution.

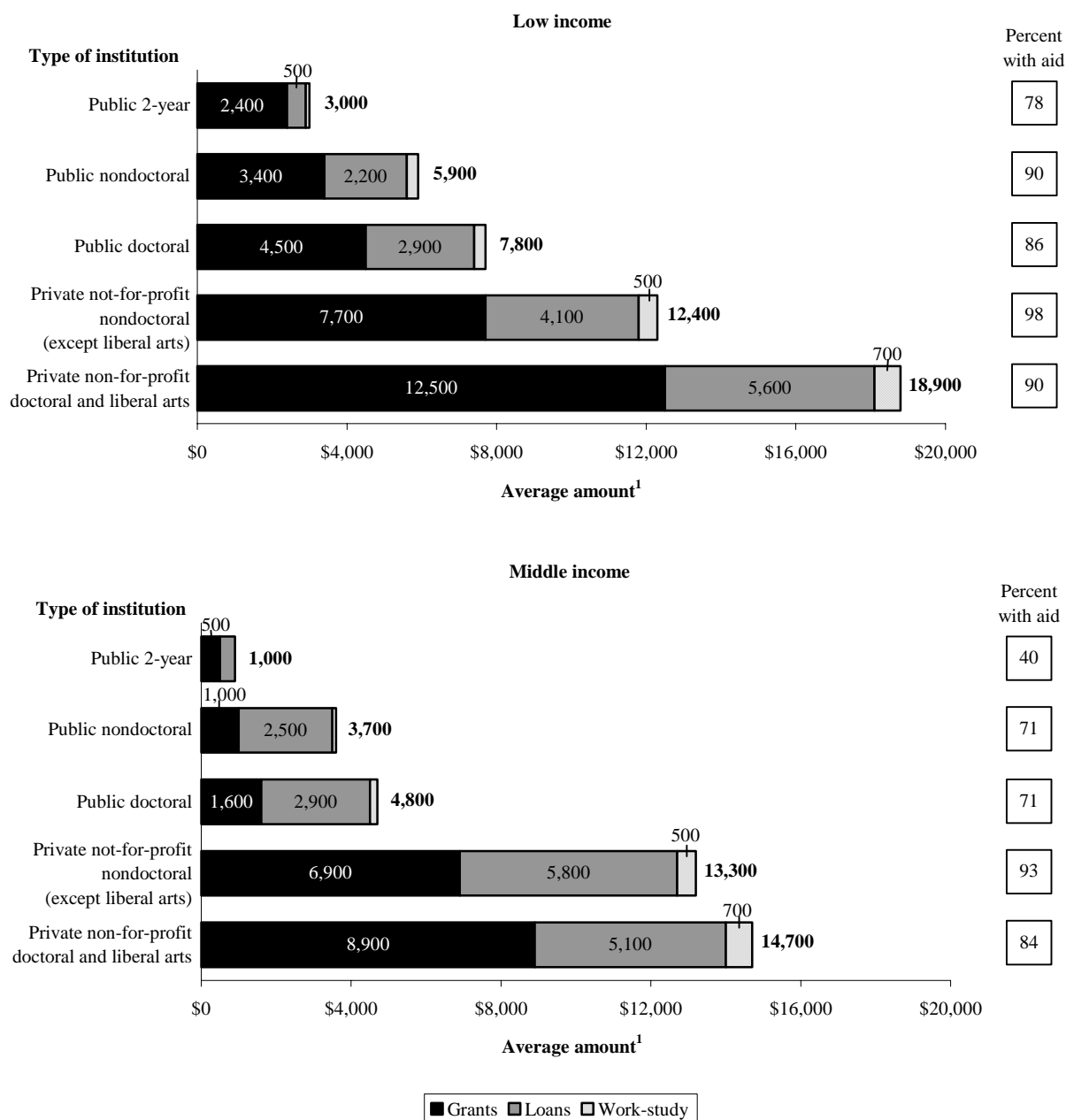
Types and Amounts of Aid

To illustrate the relative importance of the different types of aid for low- and middle-income students across institution types, figure A shows the average amounts of each type of aid computed using all students as the base (i.e., including unaided students). It shows several patterns: more aid for low-income students, more aid as price goes up, more grant aid for low-income students than middle-income students at most types of institutions, and more loans than grants for middle-income students at public institutions.

Relative Importance of Grants and Loans

For aided low-income students, aid covered almost half (48 percent) of the student budget, on average, at public 2-year institutions. At both types of public 4-year institutions and at private not-for-profit nondoctoral institutions, aid covered 64 to 68 percent of the student budget, and at private not-for-profit doctoral and liberal arts institutions, it covered 75 percent. For aided middle-income students, aid covered 29 percent of the student budget, on average, at public 2-year institutions, 46 to 50 percent at public 4-year institutions, and 62 to 63 percent at private not-for-profit 4-year institutions.

At each type of institution, low-income students had more of their budget covered by financial aid than middle-income students, on average, and a greater proportion was covered by grants. For low-income students, 39 to 49 percent of their student budget was covered by grants, on average, depending on the type of institution they attended. For middle-income students, the percentage of their student budget covered by

Figure A. Average amount of aid received by all full-time, full-year dependent low- and middle-income undergraduates, by type of aid, type of institution, and percentage with aid: 1999–2000

¹Averages computed using both aided and unaided students.

NOTE: Limited to undergraduates who attended only one institution and who were U.S. citizens or permanent residents. Detail may not sum to totals because types of aid other than grants, loans, and work-study are not shown. Average “other” aid did not exceed \$200 at any institution type. Due to space limitations, components less than \$500 are not labeled. See table 6 for amounts.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

grants did not exceed 16 percent at public institutions, but in the private not-for-profit sector, it was higher: 32 percent at nondoctoral institutions and 37 percent at doctoral and liberal arts institutions. The percentage of the total student budget covered by loans was greater for middle-income students than for low-income students except at private not-for-profit doctoral and liberal arts institutions, where no difference was detected.

Sources of Aid

For low-income students who received financial aid, federal aid (including grants and loans) constituted from 46 to 73 percent of total aid, on average, depending on the type of institution attended. For aided middle-income students, it ranged from 30 to 61 percent. The relative contribution of state grants to total aid was also higher, on average, for low-income students than for middle-income students except at public 2-year institutions, where no difference was detected. At each type of institution, institutional aid made up a greater proportion of total aid, on average, for middle-income students than for low-income students.

Remaining (Unmet) Need

Remaining, or unmet, need represents the amount of the total budget not covered by either the EFC or financial aid. In 1999–2000, about one-half of all full-time dependent students had a calculated unmet need. Depending on the type of the institution attended, 74 to 92 percent of low-income students and 38 to 65 percent of middle-income students had unmet need. At each type of institution, low-income students were more likely than middle-income students to have unmet need. Among students with unmet need, the average amount ranged from \$4,000 to \$9,300 for low-

income students, and from \$2,100 to \$10,700 for middle-income students. At public institutions, low-income students with unmet need averaged higher amounts than their middle-income counterparts. At private not-for-profit 4-year nondoctoral institutions, no difference was detected between the two groups, and at private not-for-profit doctoral and liberal arts institutions, the apparent difference was not statistically significant.

After Financial Aid

The amount of money that students and their families have to pay (after financial aid) during a given year to allow the students to enroll is called the “net price.” For this analysis, net price was computed as total price minus all financial aid *except* work-study (i.e., total price minus grants and loans).⁵ Because work-study programs provide wage subsidies to institutions and other employers, they help students obtain jobs. From the perspective of students, however, work-study earnings are still earnings from work and therefore they would have reported them in the telephone interview when asked about work. If work-study earnings were included in aid, they would be double-counted later in this analysis when the relative contributions of aid and work are examined.

Among low-income students, those at public nondoctoral institutions appeared to have the lowest average net price (\$4,600). No differences were detected in the average net prices of low-income students at public 2-year, public doctoral, and private not-for-profit nondoctoral institutions (\$5,400 to \$6,000). Because there were

⁵The calculation of net price does not include the future cost of repaying loans. For students with loans as part of their financial aid package, the total amount they pay for their education includes the amounts they borrow, plus interest, in addition to the amounts paid while enrolled.

differences in the average prices paid at these types of institutions (as discussed earlier), more financial aid compensated for the higher prices. Low-income students at private not-for-profit doctoral and liberal arts institutions had the highest average net price (\$9,100).

Among middle-income students, those at public 2-year and public 4-year nondoctoral institutions had the lowest net prices (\$7,700 and \$7,400, respectively). Their counterparts at public doctoral and private not-for-profit nondoctoral institutions had the next highest net prices (\$8,700 and \$9,400, respectively). Middle-income students at private not-for-profit doctoral and liberal arts institutions had the highest average net price (\$14,600).

Work

Working during the school year is the norm, even for full-time students. In 1999–2000, 76 percent of all full-time dependent students worked while enrolled (including students with work-study jobs). Those who worked put in an average of 22 hours per week and earned an average of \$5,100, including hours and earnings from work-study programs. At each institution type, no difference was detected between the percentages of low-income and middle-income students who worked, the amount they worked, and the average amount they earned.

Help From Parents

Reflecting the greater financial resources of their families, middle-income students were more likely than their low-income peers to report that they received help from parents paying their tuition at each type of institution. With respect to nontuition expenses, middle-income students were more likely than low-income students to report

receiving help at public doctoral institutions (34 percent vs. 28 percent), but no differences between the two groups were detected at other types of institutions.

Paying for College: A Summary

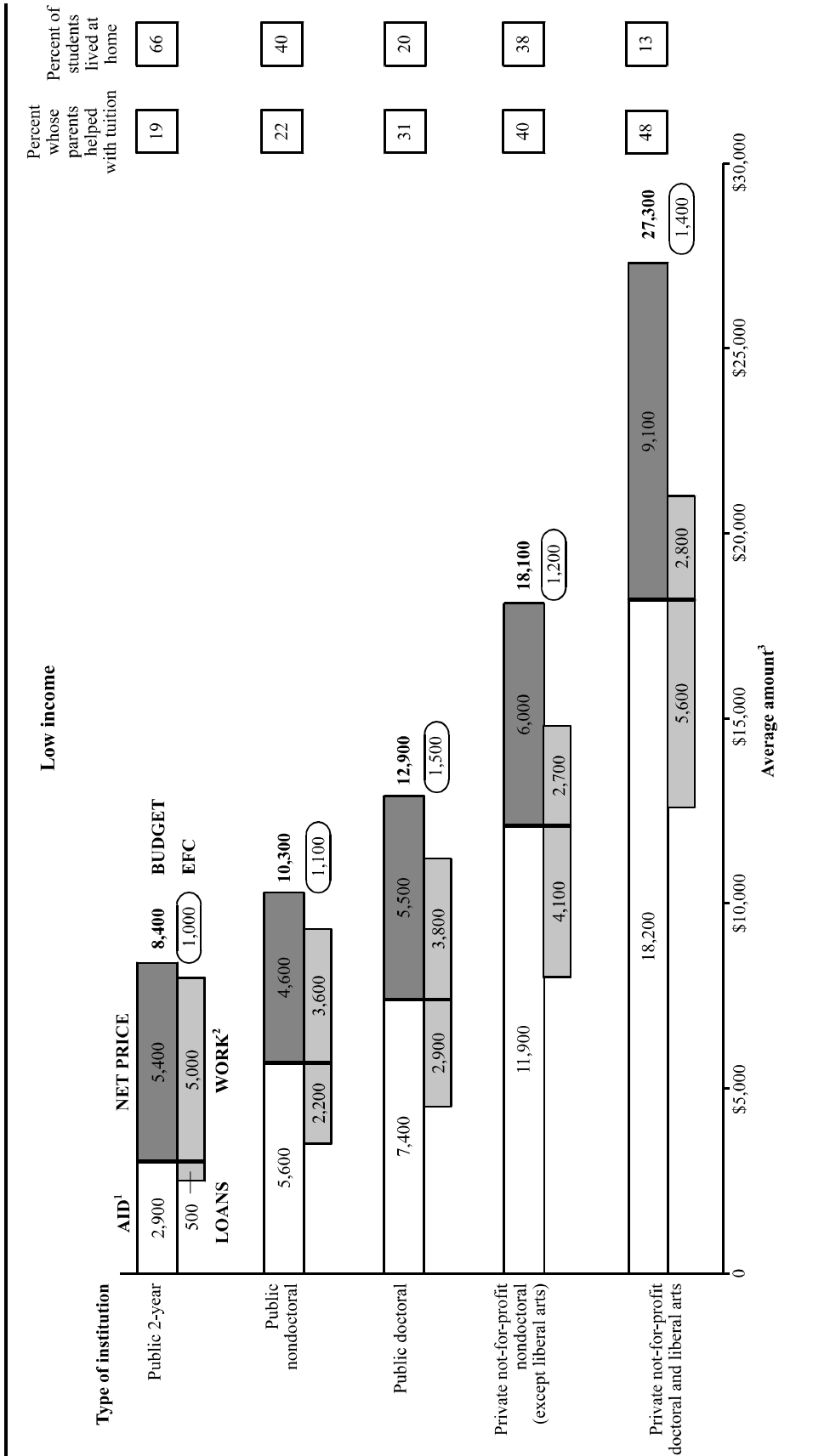
Figure B shows data for low- and middle-income students separately, with two horizontal bars for each institution type. The top bar in each set represents the average student budget and its two components: financial aid (excluding work-study) and what students and their families must pay (net price). The lower bar shows the known family effort: loans (including PLUS loans) and student earnings from work while enrolled (assuming that these earnings are used entirely for educational expenses). The averages shown include both aided and unaided students in order to indicate the relative contributions of the different amounts to the totals.

The circled numbers represent the expected family contribution (EFC). When the net price is greater than the EFC—that is, when the amount students and their families must pay is greater than the amount they are expected to pay—students have unmet financial need. A comparison of the EFC to work specifies how much of the family contribution theoretically could have come from student work while enrolled.⁶ The boxes on the right show the percentages of students whose parents (or others) helped pay their tuition and the percentages who lived at home.

For low-income students at each type of institution, the EFC fell short of the price students had to pay, even after financial aid. At public 2-year institutions, low-income students appeared to cover their educational expenses by receiving aid

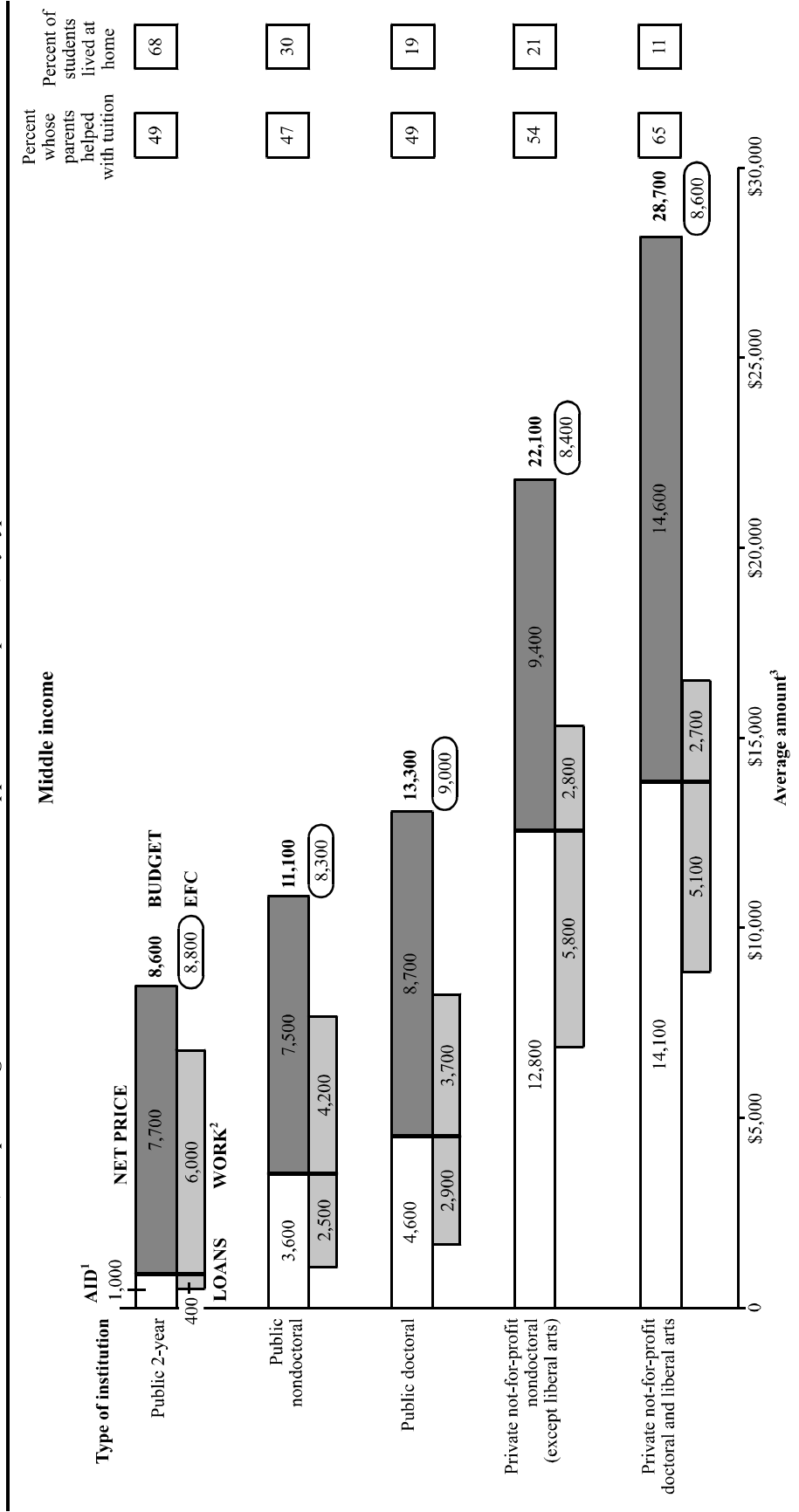
⁶There is no way of knowing what sources of funds families actually use.

Figure B. Average amounts for selected components of the average student budget for full-time, full-year dependent low- and middle-income undergraduates, sources of funds, and percentage of students who received support from their parents, by type of institution: 1999–2000



See notes at end of figure.

Figure B. Average amounts for selected components of the average student budget for full-time, full-year dependent low- and middle-income undergraduates, sources of funds, and percentage of students who received support from their parents, by type of institution: 1999–2000—Continued



HOW TO READ: The top bar in each set represents the average student budget with its two components: financial aid (excluding work-study) and what students and their families must pay (net price). The lower bar shows the known family effort: loans and student earnings from work while enrolled (assuming that these earnings are used entirely for educational expenses). The circled numbers represent the expected family contribution (EFC). When the net price is greater than the EFC—that is, when the amount students and their families must pay is greater than the amount they are expected to pay—students have unmet financial need.

¹Aid includes grants/scholarships, loans, and “other” aid (such as ROTC, aid for veterans’ dependents and survivors, and other unidentified types of aid), but excludes work-study aid. Earnings from work-study participation are included in “work.” Therefore, this average amount of aid differs from the total shown in table 6.

²Includes work-study earnings.

³Average amounts include unaided as well as aided students.

NOTE: Limited to undergraduates who attended only one institution and who were U.S. citizens or permanent residents. Detail may not sum to totals due to rounding.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 1999–2000 National Postsecondary Student Aid Study (NPSAS:2000).

(primarily grants), living at home, and working while enrolled. At public 4-year institutions, they appeared to depend primarily on aid (both grants and loans) and their own earnings, with some help from their parents. While low-income students at private not-for-profit 4-year institutions received substantial amounts of aid, it is difficult to understand how they covered their educational expenses given the gap between the net price and EFC and the amount these students reported earning on their own, especially at private not-for-profit doctoral and liberal arts institutions where relatively few students lived at home. To meet their expenses, low-income students at private not-for-profit 4-year institutions may have reduced their standard of living below the institutionally determined budget; acquired additional funds through gifts or loans from grandparents, noncustodial parents, or others whose financial

resources are not considered in the EFC formula; or used more of their income or savings than required by the EFC formula, to name some possible strategies.

At public institutions and private not-for-profit nondoctoral institutions, middle-income students and their families were in a better position than their low-income counterparts to cover their expenses. With access to student loans (and substantial grants at private not-for-profit nondoctoral institutions), these families, on average, generally appeared able to bring the net price into line with the EFC. At private not-for-profit doctoral institutions, however, despite grants and loans, there remained a relatively large unexplained amount of the net price to cover beyond the EFC.